# REMARKS

Reconsideration and withdrawal of the rejections and objections made in the instant Office Action are respectfully requested, in view of the foregoing amendments and the following remarks.

# **Summary of Amendments**

By the foregoing amendments claims 11, 30 and 33-36 are canceled and claims 10, 12, 24, 25, 28 and 32 are amended whereby claims 10, 12-15, 18, 24-29, 31 and 32 are pending in the present application. Claims 10, 25 and 28 are independent claims. Support for the amended claims can be found throughout the present specification.

Applicants note that the present amendments incorporate recitations of dependent claims into the independent claims; therefore, no new issues are raised and no additional search is required. Accordingly, entry of this amendment is proper.

It is noted that the amendment to the independent claims and the cancellation of dependent claims is without prejudice or disclaimer, and Applicant expressly reserves the right to prosecute the subject matter of the unamended and canceled claims in one or more divisional and/or continuation applications.

# **Summary of Office Action**

It is noted with appreciation that all of the rejections of claims 10-29 in the Office Action mailed May 7, 2003 have been withdrawn.

Claim 32 is objected to under 37 C.F.R. § 1.75(c), as being of improper dependent form for allegedly failing to further limit the subject matter of a previous claim.

Claims 30 and 33-36 are withdrawn from consideration because they are allegedly directed to a non-elected invention.

Claims 10-15, 25 and 28 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over an article by van BOCHOVE in Wegen, vol. 64, no. 6, June 1990, pp. 30-31 (hereafter "BOCHOVE").

Claims 18, 24, and 29 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BOCHOVE in view of HENDRIKS et al. (U.S. Patent No. 5,910,212).

Claims 26 and 27 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BOCHOVE in view of KIM et al. (U.S. Patent No. 5,432,213).

Claims 31 and 32 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BOCHOVE in view of BREDAEL (U.S. Patent No. 5,558,703).

# **Response to Office Action**

Reconsideration and withdrawal of the rejections and objections of record are respectfully requested.

# Response to Objection to Claim 32

Claim 32 is objected to under 37 C.F.R. § 1.75(c), as being of improper dependent form for allegedly failing to further limit the subject matter of a previous claim. In this regard, the Office Action notes that claim 32 depends from claim 31, and contains the same language as claim 31.

Claim 32 has been amended to depend from claim 24 instead of from claim 31.

Accordingly, this objection is moot.

# Response to Withdrawal from Consideration of Claims 30 and 33-36

Claims 30 and 33-36 are withdrawn from consideration because they are allegedly directed to a non-elected invention.

Claims 30 and 33-36 have been canceled, wherefore no further comments in this regard appear to be necessary. It is pointed out, however, that the cancellation of claims 30 and 33-36 must not be construed as Applicant's admission that the Examiner's comments are of any merit. Rather, claims 30 and 33-36 have been canceled for the mere purpose of

expediting the issuance of a patent on the present application.

# Response to Rejection of Claims 10-15, 25 and 28 under 35 U.S.C. § 102(b) or 103(a) over BOCHOVE

Claims 10-15, 25 and 28 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over BOCHOVE. The rejection appears to assert that BOCHOVE discloses all of the elements of claim 10 with the exception of the amount of filler material in the upper layer. In this regard, the Office Action asserts that it would allegedly have been obvious or inherent that when it is desired to utilize a filler material, the filler would be used in quantities greater than 2 % by weight in order to provide the solid mass needed for the structural strength intended for the service life of the asphaltic roadway.

With respect to claims 11-15, 25 and 28, the rejection essentially asserts that according to BOCHOVE, the second particle size can be in the range of broken stone, gravel and/or crushed rock, which can be as large as 11/16 or 16/22 mm, and the first particle size can be 4/8 mm, in the case of small stones, and that each layer may alternatively further comprise sand; and may have a gradient size range or be of a single-grained mixture, which allegedly "inherently requires 95 % of the aggregate to be within a specific grain mixture, such as 4/8 mm". The Office Action admits that BOCHOVE does not explicitly disclose a

specific ratio of first and second particle sizes, but alleges that it would have been obvious or inherent to one of ordinary skill in the art that BOCHOVE "clearly contemplates a variety of embodiments having different particle sizes based on noise and water drainage characteristics".

This rejection is respectfully traversed. In particular, with regard to the rejection of the independent claims, the Examiner appears to be of the opinion that the "sand" mentioned in BOCHOVE qualifies as the "filler material" recited in the rejected claims. However, it is clear that according to BOCHOVE, the sand is <u>not</u> a <u>filler</u> material, but constitutes a <u>part</u> (<u>fraction</u>) of the <u>aggregate</u>. This becomes clear from pages 7 and 8 of the English language translation of BOCHOVE relied on in the rejection. For example, at page 7, first full paragraph, of the English language translation of BOCHOVE, it is stated:

Given the fine grain-size of the upper layer <u>mixture</u>, it is advisable to keep the porosity as high as possible, and the resistance to flow - as low as possible. This can be achieved by omitting the sand <u>fraction</u> in the <u>mixture</u>,

# Emphasis provided.

It is apparent that the "mixture" in the above passage from BOCHOVE is the aggregate of the upper layer and that the sand is a "fraction" of this aggregate (mixture), i.e., not a filler material. In fact, BOCHOVE does not appear to teach or suggest the use of a filler at all. This is further confirmed by the fact that whereever BOCHOVE refers to a "mixture" in the context of the road pavement itself, this "mixture" is an aggregate. See, for example,

page 4, 3rd and 4th paragraphs from the bottom, page 5, first full paragraph, page 7, 4th paragraph, and page 8, second paragraph of the English language translation of BOCHOVE. For this reason alone, the rejection of the present claims over BOCHOVE is without merit and should be withdrawn.

Further, regarding the amount of filler material, the Office Action makes only conclusory statements, i.e., that it would allegedly have been obvious or inherent that when it is desired to utilize a filler material, the filler would be used in quantities greater than 2% by weight in order to provide the solid mass needed for the structural strength intended for the service life of the asphaltic roadway. It is respectfully submitted that the rejection does not cite any publications whatsoever to support his contention. This is yet another reason why the rejection of the present claims over BOCHOVE is untenable.

It further is noted that the present independent claims additionally recite a ratio of the second particle size distribution to the first particle size distribution of from about 3:1 to about 4:1 (previously recited in canceled claim 11). The rejection of claim 11 merely asserts that it would allegedly have been obvious or inherent to one of ordinary skill in the art that BOCHOVE "clearly contemplates a variety of embodiments having different particle sizes based on noise and water drainage characteristics", without supporting this contention by referring to any literature, let alone with an explanation as to why one of ordinary skill in the art would have been motivated (would have contemplated) to select a ratio of the second

particle size distribution to the first particle size distribution of from about 3:1 to about 4:1.

For at least all of the foregoing reasons, the rejection of the present claims over BOCHOVE is clearly not justified, and withdrawal of this rejection is warranted and respectfully requested.

# Response to Rejection of Claims 18, 24 and 29 under 35 U.S.C. § 103(a) over BOCHOVE in view of HENDRIKS et al.

Claims 18, 24, and 29 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BOCHOVE in view of HENDRIKS et al. The rejection acknowledges that BOCHOVE fails to disclose the void ratio of the Very Open Asphalt, but alleges that HENDRIKS et al. discloses an open graded asphalt composition having a void content ranging between 20-30 % and that the open graded asphalt can be applied at a temperature of less than 140 degree Celsius. The Office Action asserts that it would allegedly have been obvious to one of ordinary skill in the art to provide the water permeable roadway of BOCHOVE with a void content in the range of 20-30 % in order to maximize the water draining characteristics of the roadway.

Applicant notes that the rejection of dependent claims 18, 24 and 29 under 35 U.S.C. § 103(a) is based on a combination of the teachings of BOCHOVE and HENDRIKS et al. As discussed above with regard to the rejection of claims 10-15, 25 and 28, none of the present independent claims is anticipated or rendered obvious by BOCHOVE. HENDRIKS

et al. does not cure the deficiencies of BOCHOVE set forth above. Accordingly, even a combination of BOCHOVE and HENDRIKS et al. does not render any of the present claims unpatentable. In view thereof, withdrawal of the rejection of dependent claims 18, 24 and 29 under 35 U.S.C. § 103(a) over BOCHOVE and HENDRIKS et al. is warranted and respectfully requested.

# Response to Rejection of Claims 26 and 27 under 35 U.S.C. § 103(a) over BOCHOVE in view of KIM et al.

Dependent claims 26 and 27 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BOCHOVE in view of KIM et al. The Office Action acknowledges that BOCHOVE fails to disclose the preferred thickness for each of the layers of the roadway, and only teaches that the theoretical maximum thickness is not necessary. In this regard, the rejection alleges that KIM et al. teaches that water-permeable asphalts can be formed in preformed blocks of multiple layers, or in continuous, multiple stacked layers wherein the top layer can have a thickness of 0.05-3 cm and the lower layer can have a thickness of 0.55-5 cm in order to balance the competing needs of strength and porosity. The rejection further asserts that it would allegedly have been obvious to one of ordinary skill in the art to make the roadway of BOCHOVE in layers greater than 0.5 mm and less than 4 cm thick, in order to provide sufficient strength, in very open concrete mixtures (without supporting this allegation by any publication).

Applicant notes that regarding the thickness ranges recited in claims 26 and 27, the rejection apparently relies on disclosure of KIM et al. which relates to the <u>road blocks for footpaths</u> as illustrated in Fig. 1 of this document, whereas the resinous pavement which is illustrated in Fig. 2 of this document and which would appear to be more closely related to the present road blanket than the roadblocks of Fig. 1, has thickness ranges of 3-5 cm and 5-20 cm, respectively, i.e., completely <u>outside</u> the ranges recited in claims 26 and 27 (1.5-2 cm and 2.5-4 cm, respectively). For this reason alone, the rejection of claims 26 and 27 is not tenable.

Further, as set forth above, BOCHOVE does not render any of the present independent claims unpatentable. KIM et al. does not cure any of the above-discussed deficiencies of BOCHOVE, wherefore a combination of these two documents does not support a rejection of any of the present claims, including dependent claims 26 and 27. This is yet another reason why the rejection of claims 26 and 27 under 35 U.S.C. § 103(a) is unwarranted and should be withdrawn, which action is respectfully requested.

# Response to Rejection of Claims 31 and 32 under 35 U.S.C. § 103(a) over BOCHOVE in view of BREDAEL

Dependent claims 31 and 32 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over BOCHOVE in view of BREDAEL. The Office Action acknowledges that BOCHOVE does not disclose the specific use of SBS copolymer, but alleges that BREDAEL

teaches the use of SBS in roadways and that it would have ben obvious to make the roadway of BOCHOVE with an SBS modified binder in order to increase the service life of the roadway.

Applicant notes that claims 31 and 32 are dependent, directly or indirectly, from claim 10. As has been explained in detail above, BOCHOVE does not render the subject matter of any of the present independent claims unpatentable. BREDAEL does not cure any of the deficiencies of BOCHOVE. The rejection of any claim that depends from claim 10 is without merit for this reason alone. Accordingly, it is respectfully requested that the rejection of claims 31 and 32 under 35 U.S.C. § 103(a) be withdrawn as well.

# **CONCLUSION**

In view of the foregoing, it is believed that all of the claims in this application are in condition for allowance, which action is respectfully requested. If any issues yet remain which can be resolved by a telephone conference, the Examiner is respectfully invited to contact the undersigned at the telephone number below.

February 26, 2004 GREENBLUM & BERNSTEIN, P.L.C. 1950 Roland Clarke Place Reston, VA 20191 (703) 716-1191 Respectfully submitted, Jean-Paul MICHAUT

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